CLAIM AMENDMENTS

Please amend the claims by amending claims 1 and 24 as indicated below and cancelling

claims 5, 7, and 10-12, all without prejudice, as indicated on the following listing of all the

claims in the present application after this Amendment:

Listing of Claims

1.(Presently Amended) A method for image sensing comprising the acts of:

producing, from a photo detector, a plurality of detected electronic signals responsive to

an optical image;

amplifying, with a column buffer amplifier, signals selected from the detected electronic

signals to produce a plurality of amplified signals;

sampling, with a correlated double sampler, signals selected from the amplified signals to

produce a plurality of sampled signals;

and

clamping, by a clamp circuit, at least one signal selected from the detected electronic

signals and the sampled signals in response to a detecting of at least one over-saturation

condition;

whereby image inversion is at least partially abated.

2. (Original) The method of claim 1 wherein

the photo detector comprises a photo diode.

3. (Original) The method of claim 1 wherein

the photo detector comprises a photo gate.

4. (Original) The method of claim 1 wherein

the clamp circuit is implemented in a technology selected from a list consisting of N-well CMOS

process technology and of P-well CMOS process technology.

Claim 5: Cancelled.

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6. (Withdrawn) The method of claim 5 wherein the clamp circuit limits a reset voltage.

Claim 7: Cancelled.

- 8. (Withdrawn) The method of claim 5 wherein the clamp circuit operates in conjunction with a column buffer amplifier comprising a distributed pixel column amplifier.
- 9. (Withdrawn) The method of claim 8 wherein the distributed pixel column amplifier provides to the column buffer amplifier a feedback selected from a list consisting of a differential feedback and a single-ended feedback.

Claims 10-12: Cancelled.

13. (Withdrawn) A method for processing a signal comprising:

producing a plurality of output luminance signals responsive to an incident light;

generating a first sample of one of the luminance signals at a first time and a second sample of the respective luminance signal at a second time;

producing a threshold passed signal output responsive to a condition of over-saturation by the incident light;

and

clamping the respective luminance signal sample during the first time responsive to the threshold passed signal.

- 14. (Withdrawn) The method of claim 13 wherein the plurality of output luminance signals are produced by sensors arranged as an array of sensors having two dimensions.
 - 15. (Withdrawn) The method of claim 14 further comprising the act of: selecting a subset of luminance signals according to a dimensional direction in the array.

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16. (Withdrawn) A circuit for providing a signal comprising:

a plurality of pixel cells having a plurality of output luminance signals responsive to an incident light;

a correlated double sampler operative to generate a first sample of one of the luminance signals at a first time and a second sample of the respective luminance signal sample at a second time;

a threshold detection circuit having a threshold passed signal output responsive to a condition of one of the pixel cells of being over-saturated by the incident light;

and

a clamp circuit wherein the clamp circuit clamps the respective luminance signal during the first time responsive to the threshold passed signal.

- 17. (Withdrawn) The circuit of claim 16 further comprising: a plurality of per-column circuits that selects a subset of luminance signals.
- 18. (Withdrawn) The circuit of claim 17 wherein

the subset of luminance signals corresponds to a direction selected from a list consisting of a column in an image to which the plurality of pixel cells is responsive and a row in an image to which the plurality of pixel cells is responsive.

19. (Withdrawn) The circuit of claim 18 wherein

the plurality of per-column circuits has a greater cardinality than the subset of luminance signals.

20. (Withdrawn) A circuit for providing a signal comprising:

a means for producing a plurality of output luminance signals responsive to an incident light;

a means for generating a first sample of one of the luminance signals at a first time and a second sample of the respective luminance signal at a second time;

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a means for producing an over-saturation signal output responsive to a condition of oversaturation by the incident light;

and

a means for clamping the respective luminance signal sample during the first time responsive to the over-saturation signal.

- 21. (Withdrawn) The circuit of claim 20 further comprising: a means for selecting a subset of luminance signals.
- 22. (Withdrawn) The circuit of claim 21 wherein

the subset of luminance signals corresponds to a column in an image to which the circuit for providing a signal is responsive.

23. (Withdrawn) The circuit of claim 21 wherein

the subset of luminance signals corresponds to a row in an image to which the circuit for providing a signal is responsive.

24.(Presently Amended) In an image sensor that correlates a first sample of a first signal during a first interval after reset of a photo detector and a second sample of the first signal during a later interval in the same sampling cycle as the first interval to produce a luminance signal, a method for abating an error in the luminance signal due to excessively rapid slewing of the first signal during the first interval wherein the improvement comprises:

detecting that the first signal is slewing excessively rapidly during the first interval; and limiting the value of the first sample;

whereby the image sensor produces an output of improved accuracy.

- 25. (Original) The method of claim 24 wherein: the error is an image inversion due to over-saturation.
- 26. (Withdrawn) The method of claim 24 wherein:

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the detecting is responsive to the first signal reaching the bounds of a predetermined threshold.